APPLICATION UNDER UNITED STATES PATENT LAWS

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Invention: **METHOD OF PROVIDING COMPARATIVE MARKET INFORMATION**

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<u>This is a:</u>

☐ Provisional Application

☒ Regular Utility Application

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☐ PCT National Phase Application

☐ Design Application

☐ Reissue Application

☐ Plant Application

☐ Substitute Specification
<u>Sub. Spec</u> Filed _____
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Sub. Spec. filed _____
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<div align="center"># SPECIFICATION</div>

METHOD OF PROVIDING COMPARATIVE MARKET INFORMATION

FIELD OF THE INVENTION

The present invention relates to the field of

5   market research tools, and more particularly to a

computer-implemented method of providing market

information with respect to each of a plurality of

market participants in each of a plurality of channels.

DESCRIPTION OF THE PRIOR ART

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In today's highly competitive markets,

manufacturers and retailers need as much information as

possible in order to determine the respective market

positions and to plan for the future. It is vital that

15   market participants know their respective market shares

in various marketing channels and with respect to

various brands or product lines. Knowledge of channels

and brands in which a market participant is gaining or

losing market share is important for the market

20   participant to stay, or become more, competitive.

Because market information is so vital, market

participants tend to collect vast amounts of data.

However, people can process and understand only limited

amounts of data. Accordingly, there is a need for a

25   method of displaying data in a readily understandable

and digestible form.

SUMMARY OF THE INVENTION

The present invention provides a method of

30   providing information with respect to a market. The

method of the present invention displays, for each of a

plurality of market participants, information with respect to the total number and value of units sold during a period in each of a plurality of channels of the market. The market may be a national market or a
5   user selected metropolitan area. Preferably, the information is displayed in a table in which the market participants are associated with a first axis and the channels are associated with a second axis.

The method displays graphical controls by which a
10 user may select a style of displaying the information with respect to number and value of units sold. One of the styles the user may select is actual total number and dollar value of units sold. Selection of this control gives the user a view of the absolute size of
15 the business done by each market participant in each channel, and in the market as a whole. Another style the user may select is percentage of the number and value of units sold by a particular market participant in a particular channel compared to the total number of
20 units sold and value in the entire market. Selection of this control gives the user a view each participant's relative share in each channel. A further style a user may select is percentage of the number and value of units sold compared to the total number and value of
25 units sold across all channels. Selection of this control gives the user insight into how a particular market participant uses the various market channels. Yet a further style a user may select is percentage of the number and value of units sold compared to the total
30 number of units and value sold in a channel by all market participants. Selection of this style gives the

user a view of the each participant's share of the market in each channel.

The method of the present invention may also display graphical controls for enabling the user to display additional information with respect to each of the market participants in each of the channels. For example, the user may display unit or value market share change from one period to another. Additionally, the user may display pricing information, such as average unit price, discount percentage, or average percentage unit price change from one period to another, for each participant in each channel. The user may also display unit or value volume percentage change from one period to another for each participant in each channel.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a block diagram of a system according to the present invention.

Figure 2 is a pictorial view of a computer display screen showing number and value of units sold in terms of actual values for the entire market.

Figure 3 is a pictorial view of a computer display screen showing number and value of units sold in terms of percentage of the entire market.

Figure 4 is a pictorial view of a computer display screen showing number and value of units sold in terms of percentages for each market participant across all market channels.

Figure 5 is a pictorial view of a computer display screen showing number and value of units sold in terms

of market share percentage for each market participant in each market channel.

Figure 6 is a pictorial view of a computer display screen showing number and value of units sold in terms of percentage of the entire market and the average price paid and discount percentage for each market participant in each market channel.

Figure 7 is a pictorial view of a computer display screen showing number and value of units sold in terms of percentage of the market in a selected metropolitan area and the average price paid and discount percentage for each market participant in each market channel.

Figure 8 is a pictorial view of a computer display screen similar to the display of Figure 7, with the information for one market participant expand to the brand level and the information for one market channel expanded to the sub-channel level.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawings, and first to Figure 1, a system adapted to implement the method of the present invention is designated generally by the numeral 11. System 11 includes a personal computer 13 that is programmed according to the present invention. Personal computer 13 has access to various data, including purchase diary data 15, point-of-sale data 17 and wholesale data 19. Purchase diary data 15 is in the nature of survey data typically obtained from a market research organization. The market research organization provides a selected number of households with a purchase diary. Participants in the purchase diary program enter

purchase information into their diaries. The market
research organization collects the diaries and then uses
statistical sampling techniques to extrapolate the
results to a market, which may be the entire nation or a
certain metropolitan area. Purchase diary data 15
provides information with respect to all participants in
the market.

Point-of-Sale data 17 and wholesale data 19 are
data collected from retailers and within the
organization itself. Point-of-Sale data 17 and
wholesale data 19 may be used as a check on the accuracy
of the purchase diary data and to aid in extrapolating
the purchase diary data.

The system shown in Figure 1 is a stand-alone
system. However, as will be recognized by those skilled
in the art, the method of the present invention may be
implemented in a distributed or network environment.

The present invention provides a graphical user
interface into a data handling application, such as a
spreadsheet. An example of the spreadsheet with which
the graphical user interface of the present invention
may be used is Microsoft™ Excel™. Preferably, the
underlying spreadsheet provides pivot table functions.

Screens providing examples of features of the
method of the present invention are illustrated in
Figures 2-8. Referring first to Figure 2, a screen
according to the present invention includes an
interactive table 21 that allows a user to view
information with respect to various market participants
in various channels. In the screen of Figure 2, the
information is given with respect to the entire market,

which in the illustrated embodiment is the greeting card
business for the entire United States in calendar year
1999. The market participants are associated with rows
of Table 21 and they are identified as Company A,
5   Company B and other. The other category includes
substantially all market participants besides Company A
and Company B. Each column of Table 21 is associated
with a market channel. In the example of Figure 2, the
channels are card shops, discount stores, food stores,
10   drug stores, and others. The other category includes
such establishments as department stores and other
miscellaneous retailers.

The basic information provided with respect to each
market participant in each channel in Table 21 is units
15   sold and dollars paid during the period. According to
the present invention, the basic information can be
displayed in any of four user selectable styles. A
column of buttons 23 is provided with which the user may
select the presentation style. In Figure 2, the
20   presentation style is actual values, which is selected
by clicking on actual values button 25. The other
presentation styles include: percent of total, which is
selected with button 27 and illustrated in Figure 3;
percent of row, which is selected with button 29 and
25   illustrated in Figure 4; and percent of column, which is
selected with button 31 and illustrated in Figure 5.

The various presentation styles presented according
to the present invention provide the user with different
views of the data and provide the user with different
30   information with respect to the market. In the actual
values presentation style of Figure 2, the information

is presented in absolute terms. In the percent of total presentation style of Figure 3, the user can tell quickly what share a particular market participant has of the total market in a particular channel. For

5   example, referring to Figure 3, a user can tell that Company A sold 24.3% of all greeting cards sold in the United States in 1999 in card shops.

The percent of row presentation style, as illustrated in Figure 4, illustrates how a particular

10   market participant's sales are distributed across the marketing channel. For example, referring to Figure 4, Company A sold 47.2% of its units through the card shop channel while Company B sold only 13.4% of its units through that channel. The percent of rows presentation

15   style gives the user information as to the channels in which the market participants devote their efforts.

The percent of column presentation style, which is illustrated in Figure 5, displays each market participant's market share in each channel. Referring

20   to Figure 5, in terms of units sold, Company A has a 63.3% share of the card shop channel as compared to Company B's 9.9% share in that channel.

The graphical user interface of the present invention also includes a column of buttons 33 with

25   which the user may select to display data in addition to the basic units sold and dollars paid data. The additional data includes unit share change (year-to-year), dollar share change (year-to-year), average price paid, discount percentage, units sold in the prior

30   years, dollars paid in the prior year, unit percentage change (year-to-year), dollar percentage change (year-

to-year) and average price paid change (year-to-year).
The user can select to display any of the additional
data by clicking on the plus sign icon associated with
the additional data label.

5   Referring to Figure 6, there is shown an example of
Table 21 in which the average price and discount
percentage buttons have been selected. As shown in
Figure 6, the average price paid for cards of Company A
in the card shop channel is $2.04 while the average
10   price paid for the cards of Company B in the card shop
channel is $1.97. The user can revert to the display of
Figure 3 by clicking on the minus sign
icons next to the average price and discount percentage
labels of Figure 6.

15   The user interface of the present invention also
provides user selectable summary tables that provide
various demographic information with respect to the
market. The demographic information is presented in a
summary Table 41. The content of Summary Table 41 is
20   selected with a set of controls in a summary view field
43. The summary demographic information includes a
growth equation, which is currently displayed in summary
Table 41, retail sales, roof tops, chains, dollars per
roof top, key players, race/ethnicity, income, age. The
25   summary demographic information is particularly useful
with respect to an analysis of market shares in
particular metropolitan areas.

The data displayed in tables 21 and 41 may be for
the market as a whole as shown in Figures 2-6 or for a
30   selected metropolitan area, as shown in Figures 7 and 8.
A control 43 is provided to enable the user to toggle

back and forth between the entire market view and the metropolitan area view. In Figures 2-6 control 43 is labeled Go To Metro. The user may go to the metropolitan area view by clicking on control 43.

5   An example of a metropolitan area view is displayed in Figures 7 and 8. Referring to Figures 7 and 8, the user interface of the present invention includes a drop down menu 45 with which the user can select to view any of about 40 metropolitan areas in the United States. In 10 Figure 7, the user has selected the Los Angeles metropolitan area. The information shown in tables 21 and 41 of Figure 7 is of the same type as that displayed in tables 21 and 41 of Figure 2 – 6. However, the information relates only to the Los Angeles metropolitan 15 area.

     Another feature of the user interface of the present invention is illustrated with respect to Figure 8. The user interface of the present invention provides for increased granularity with respect to both brands 20 and sub-channels. As shown in Figure 8, the information with respect to Figure A is divided among its brands, which are designated as Brand 1 and Brand 2. Similarly, the drug channel information is divided among three drug sub-channels including chain drug stores, independent 25 drug stores and discount drug stores. The more granular information is displayed by double clicking on the parent label. For example, the Brand 1 and Brand 2 information is displayed by double clicking on the Company A label. Similarly, the chain drug, independent 30 drug, and discount drug information is displayed by double clicking on the drug label. The information can

be collapsed back by double clicking on the parent
label.

From the foregoing, it may be seen that the method
of the present invention provides a user interface by

5   which a user can display complex market information
share information in a flexible, easily understandable
and digestible way. The user interface of the present
invention provides multiple views into the data in
multiple levels of granularlity. The user can view more

10   or less information, according to the user's needs.